

## REMARKS

Reexamination and reconsideration of the application are requested.

The examiner's rejection of claim 25 as being "obvious", under 35 U.S.C. 103, is respectfully traversed. The examiner rejects this claim as being unpatentable over Bieber (US 5,788,028).

Claim 25 is directed to a method for determining a present coil temperature of a coil of a magnetorheological (MR) damper of an operating automotive vehicle, wherein the coil is powered by an output of a controller connected to the coil through a conductor. Claim 25 requires the step of calculating a coil-plus-conductor resistance from the voltage and the current of the output of the controller when the controller applies a test current to the coil and the conductor. Claim 25 also requires the step of calculating the present coil temperature using at least the coil-plus-conductor resistance and compensating for the resistance of the conductor.

The examiner alleges that, "Simply 'compensating' for the resistance of the conductor is, presumably, inherent in the calculation method used by Bieber or would have been obvious to obtain a more precise measurement".

Applicants respectively disagree. Bieber does not teach, suggest or describe compensating for the resistance of the conductor. There is no inherent compensation for the resistance of the conductor in the disclosed calculation method of Bieber. If the examiner believes otherwise, applicants request that the examiner specifically point out where in the calculation method of Bieber such inherent compensation is supposed to be taking place.

It is noted from the quote in the second previous paragraph that the examiner, in the alternative, has alleged it would have been obvious to compensate for the resistance of the conductor in the calculation method used by Bieber "to obtain a more precise measurement". There is no suggestion in Bieber of the desirability of compensating for the resistance of the conductor in his calculation method, and the examiner has provided no motivation in Bieber for such compensation. If the examiner is relying on personal opinion, applicants request that the

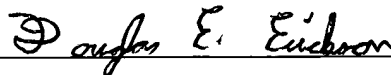
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examiner specifically cite art which teaches compensating for the resistance of a conductor which connects a controller to a coil when calculating a present coil temperature using at least a coil-plus-conductor resistance from the voltage and the current of the output of the controller when the controller applies a test current to the coil and the conductor, as required by claim 25.

It is further noted that Bieber discloses a coil of a solenoid valve of a damper and not a coil of a magnetorheological (MR) damper as required by applicants' claim 25. The end portion of the conductor 72 of Bieber which connects to the solenoid coil 70 is located outside the outer tube 12 of the damper (shock absorber) 10. If the resistance of the conductor were considered a problem by Bieber, would it not be easy for Bieber to run a voltage test lead to the easily accessible end portion of the conductor 72 (see figures 1-2) proximate the solenoid coil 70 so that the resistance ( $V/I$ ) in Bieber's equation is the resistance of the coil only. Should Bieber do this however, Bieber would not be calculating a coil-plus-conductor resistance as required by applicants' claim 25. It is pointed out that, in many examples of MR dampers, the MR coil is a coil of the MR piston and therefore is located inside the outer tube of the damper (see page 1, column 14-15 of the specification) so that the end portion of the MR conductor which connects to the MR coil also is located inside the outer tube of the damper and is not easily accessible.

Inasmuch as each of the rejections has been answered by the above remarks and amended claims, it is respectfully requested that the rejections be withdrawn, and that this application be passed to issue.

Respectfully submitted,



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